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EXAMINER

NGUYEN, L

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2712

11

DATE MAILED: 03/01/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/012,144

Applicant(s)
Napoli et al.

Examiner
Luong Nguyen

Group Art Unit
2712



☒ Responsive to communication(s) filed on Dec 13, 1999

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-10 and 12-15 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-10 and 12-15 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☒ The proposed drawing correction, filed on Dec 13, 1999 is ☒ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed on 12/13/1999 have been fully considered but they are not persuasive.

In re pages 5-6, Applicants argue that Fellegara et al. do not include a user interface for selectively enabling a quick review feature in which the image display is automatically turned on after an image is captured, and an image display controller responsive to actuation of the shutter button for automatically powering up the image display after the image is captured in order to display the captured image stored in the first buffer memory.

In response, regarding claim 5, Applicants amended claim 5 with the claimed limitations “a user interface for selectively enabling a quick review feature in which the image display is automatically turned on after an image is captured, the user interface including an actuatable shutter button effective when actuating for permitting the image sensor to capture the image,” and “an image display controller responsive to actuation of the shutter button for automatically powering up the image display after the image is captured in order to display the captured image stored in the first buffer memory.” The Examiner considers that claim 5 as amended still do not distinguish over Fellegara et al. patent. Fellegara et al. disclose the shutter button 24 which causes the camera controller 68 to initiate the power up mode prior to performing the pre-exposure operation (col. 11, lines 20-31). Fellegara et al. disclose review switch 37 can be activated by the

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camera operator to display image on the main screen display unit 36 (col. 12, lines 62 through col. 13, lines 15). Fellegara et al. disclose when the review switch 37 is activated, the microcontroller activates the main screen display unit 36 to display the review image (col. 13, lines 1-15).

In re pages 6-7, Applicants argue that Fellegara et al. do not disclose or suggest a processor operating over a second time interval to process an image, and a user enabled control section coupled to the processor for erasing an unwanted image before the end of the second time interval in order to facilitate the capture and processing another image before processing unwanted image is completed.

In response, regarding claim 9, Applicants amended claim 9 with the claimed limitations “said processor operating over a second time interval to process an image”, and “a user enabled control section coupled to the processor for erasing an image before the end of the second time interval so as to facilitate the capture and processing of another image.” The Examiner considers that claim 9 as amended still do not distinguish over Fellegara et al. patent. Fellegara et al. disclose that in film capture mode, the microcontroller 120 generates the processed image to the flash memory (col. 11, lines 65-67 and col. 12, lines 1-3) for display purposes only (col. 11, lines 59-62). After the digital image is displayed in film capture mode, the microcontroller erases the image which is stored in the flash memory (col. 13, lines 17-20). He also teaches a quick review switch (fig. 5, item 37) that allows the user to review the last image captured. When the quick review switch is activated, a microcontroller (fig. 6, item 120) activates the main screen display unit to display the last image captured for a predetermined period of time. The microcontroller

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also initiates the transfer of the working image stored in the working memory for displaying the captured image (col. 13, lines 2-7). After the predetermined period of time, the microcontroller deactivates the main screen display unit to conserve power (col. 13, lines 10-16). Lastly, when the camera operator rewinds the film (col. 6, lines 1-12) into the cartridge, the images are preferably erased by the microcontroller (col. 13, lines 17-20).

In re page 7, Applicants argue that when the quick review feature is enabled, the image display is automatically turned on in response to actuation of the shutter button, this feature is neither disclosed nor suggested in Fellegara et al.

In response, the Examiner considers that Fellegara et al. do disclose this feature. Fellegara et al. disclose shutter button 24 causes the main camera controller 68 to initiate the power up mode (col. 11, lines 20-30) and quick review switch 37 can be activated to display the image on screen display unit 36 (col. 12, lines 62-67).

In re pages 9-10, Applicants argue that Fellegara et al. and Nagano fail to disclose or suggest the electronic still camera as set in amended claim 1. Nagano does not teach or suggest the quick view feature, in which the image display is automatically turned on in response to actuation of the shutter button.

In response, regarding claim 1, the Applicants amended claim 1 with the claimed limitations “an actuatable shutter button effective when actuating for permitting the sensor to capture the image” and “a quick view feature in which the image display is automatically turned on in response to actuation of the shutter button.” The Examiner considers that claim 1 as

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amended still do not distinguish over Fellegara et al. patent in view of Nagano patent. Fellegara et al. disclose shutter button 24 causes the main camera controller 68 to initiate the power up mode (col. 11, lines 20-30) and quick review switch 37 can be activated to display the image on screen display unit 36 (col. 12, lines 62-67).

Drawings

2. The proposed drawing correction to Fig.1 and Fig.2, filed on 12/13/1999 is approved.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

4. Claims 5, 6, 9, and 12-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Fellegara (US 5,845,166).

As for claims 5, 6, 9, and 12-13, Fellegara discloses a hybrid camera that captures and displays images with an image sensor (fig. 6, item 94) and a main screen display unit (fig. 5, item 36). The hybrid camera has an optical viewfinder (fig. 2, item 20) which includes a device for

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appropriately framing the subject image (col. 5, lines 39-43). It also has a shutter button for initiating capture of the images (shutter button 24, col. 11, lines 20-30). It also has a working memory that serves as a frame buffer for a main screen display unit (col. 8, lines 10-12) that displays the image captured (col. 13, lines 2-7). The image is processed by a LCD controller (col. 7, lines 23-26) of a microcontroller unit (fig. 6, item 120) over a period of time with a timing and data handling ASIC. The ASIC works automatically without intervention from the microcontroller (col. 7 lines 61-62). Fellegara teaches three image capture modes. One of the modes, film capture mode, is capable of capturing and storing photographic images on photographic film and digital images in the flash memory (col. 9, lines 62-65). Also, in film capture mode, the microcontroller generates the processed image to the flash memory (col. 11, lines 65-67 and col. 12, lines 1-3) for display purposes only (col. 11, lines 59-62). After the digital image is displayed in film capture mode, the microcontroller erases the image which is stored in the flash memory (col. 13, lines 17-20). He also teaches a quick review switch (fig. 5, item 37) that allows the user to review the last image captured. When the quick review switch is activated, a microcontroller (fig. 6, item 120) activates the main screen display unit to display the last image captured for a predetermined period of time. The microcontroller also initiates the transfer of the working image stored in the working memory for displaying the captured image (col. 13, lines 2-7). After the predetermined period of time, the microcontroller deactivates the main screen display unit to conserve power (col. 13, lines 10-16). Lastly, when the camera

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operator rewinds the film (col. 6, lines 1-12) into the cartridge, the images are preferably erased by the microcontroller (col. 13, lines 17-20).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fellegara et al. (US 5,845,166) in view of Nagano (US 5,561,462).

As for claim 1, Fellegara discloses a hybrid camera that includes an image sensor (fig. 6, item 94); an optical viewfinder (fig. 2, item 20); an actuable shutter button (fig. 3, item 24, col. 11, lines 20-30); and a main screen display unit (fig. 5, item 36) that displays the image captured by the image sensor. He also discloses a quick review switch (fig. 5, item 37) that allows the user to review the last image captured (col. 12, lines 62-67). When the quick review switch is activated, a microcontroller (fig. 6, item 120) activates the main screen display unit to display the last image captured for a predetermined period of time. Then, the microcontroller deactivates (or turns off) the main screen display unit to conserve power. The user can, but is not required to, deactivate the display unit with the quick review switch (col. 13, lines 10-16). This inherently means that the display unit can be turned off automatically. He does not teach a display that is

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automatically turned on without user intervention. Instead, the display unit is not activated unless specifically turned on by the user (col. 13, lines 7-10).

Now, Nagano discloses an electronic still camera that includes an image sensor (fig. 6, item 4) and an electronic view finder (EVF) (fig. 6, item 5) that displays the image captured by the image sensor. For the embodiment in figure 6, Nagano teaches a control circuit that causes automatic interval shooting for a number of pictures and at intervals of a given period of time. This feature is also capable of suspending a driving action on the image sensor and turning off the electronic viewfinder after the interval shooting operation. When shooting and recording is performed, it is inherent that the EVF is automatically turned on, without user intervention (col. 8, lines 20-28). Furthermore, Nagano describes this operation on a flow chart in figure 7. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to include a feature that automatically turns on the display after the image is captured. The user does not have to miss out on capturing other images or scenes while spending time turning on the display.

As for claims 2 and 3, Fellegara further discloses a working memory (fig. 6, item 124) that serves as a frame buffer for a main screen display unit (col. 8, lines 10-12) that displays the image captured for quick viewing (col. 13, lines 2-7). The image is processed by a LCD controller (col. 7, lines 23-26) of a microcontroller unit (fig. 6, item 120). Fellegara teaches three image capture modes. After the image has been reviewed, the image is stored in output memories corresponding to each mode, such as the memory card of the digital capture mode (col. 9, lines 62-65).

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However, because these claims are dependent, Fellegara does not teach a display that is automatically turned on without user intervention.

Once again, Nagano discloses an electronic still camera that includes an image sensor (fig. 6, item 4) and an electronic view finder (EVF) (fig. 6, item 5) that displays the image captured by the image sensor. For the embodiment in figure 6, Nagano teaches a control circuit that causes automatic interval shooting for a number of pictures and at intervals of a given period of time. This feature is also capable of suspending a driving action on the image sensor and turning off the electronic viewfinder after the interval shooting operation. When shooting and recording is performed, it is inherent that the EVF is automatically turned on, without user intervention (col. 8, lines 20-28). Furthermore, Nagano describes this operation on a flow chart in figure 7. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to include a feature that automatically turns on the display after the image is captured. The user does not have to miss out on capturing other images or scenes while spending time turning on the display.

For claim 4, Fellegara teaches that the image is processed by a LCD controller (col. 7, lines 23-26) of a microcontroller unit (fig. 6, item 120). As stated before, Fellegara teaches three image capture modes. In, film capture mode, the microcontroller generates the processed image to the flash memory (col. 11, lines 65-67 and col. 12, lines 1-3) for displaying the image (col. 11, lines 59-62). After the digital image is displayed in film capture mode, the camera operator can decide to rewind the film (col. 6, lines 1-12) into the cartridge. Then, the microcontroller erases

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the image which is stored in the flash memory (col. 13, lines 17-20). He also teaches a quick review switch (fig. 5, item 37) that allows the user to review the last image captured. However, because these claims are dependent, Fellegara does not teach a display that is automatically turned on without user intervention. Lastly, when, the images are preferably erased by the microcontroller (col. 13, lines 17-20).

Once again, Nagano discloses an electronic still camera that includes an image sensor (fig. 6, item 4) and an electronic view finder (EVF) (fig. 6, item 5) that displays the image captured by the image sensor. For the embodiment in figure 6, Nagano teaches a control circuit that causes automatic interval shooting for a number of pictures and at intervals of a given period of time. This feature is also capable of suspending a driving action on the image sensor and turning off the electronic viewfinder after the interval shooting operation. When shooting and recording is performed, it is inherent that the EVF is automatically turned on, without user intervention (col. 8, lines 20-28). Furthermore, Nagano describes this operation on a flow chart in figure 7. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to include a feature that automatically turns on the display after the image is captured. The user does not have to miss out on capturing other images or scenes while spending time turning on the display.

7. Claims 7-8, 10, and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fellegara et al. (US 5,845,166).

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As for these claims, Fellegara does not explicitly teach a processing section that responds to a command by terminating the processing of the image and erasing the incomplete processed image from the second memory. However, he does teach that the image is processed by a LCD controller (col. 7, lines 23-26) of a microcontroller unit (fig. 6, item 120). In, film capture mode, the microcontroller generates the processed image to the flash memory (col. 11, lines 65-67 and col. 12, lines 1-3) for displaying the image (col. 11, lines 59-62). After the digital image is displayed in film capture mode, the camera operator can decide to rewind the film (col. 6, lines 1-12) into the cartridge. Then, the microcontroller erases the image which is stored in the flash memory (col. 13, lines 17-20). It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to send a command to the processing section to erase the image before the processing is complete. Doing so, conserves the battery power in case the operator is not satisfied with the captured image.

Conclusion

8. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Luong Nguyen** whose telephone number is (703) 308-9297. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Wendy Garber**, can be reach on (703) 305-4929.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:


(703) 308-6306

or:

(703) 308-6296

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal drive, Arlington, VA., Sixth Floor (Receptionist).

LN LN
2/25/2000


Wendy Garber
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